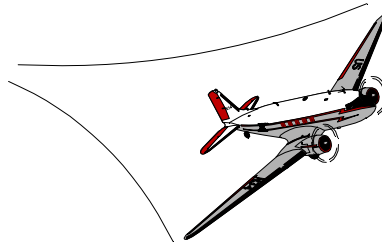


SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC



U.S. Department
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This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you, an owner or operator of Robinson R22 helicopters to adhere to the manufacturer's maintenance manual during installation and torquing of tail rotor teeter (delta) hinge bolts, part number NAS1304-38 or NAS6604-38.

Background

After experiencing a high frequency tail rotor vibration, an R22 helicopter made a forced landing. Examination revealed the tail rotor teeter hinge bolt broke due to fatigue failure, and the failure indications were consistent with those produced by fastener undertorquing. Fastener undertorquing results in loss of clamp-up force and allows the tail rotor to bend the bolt instead of riding on the teeter hinge (or delta hinge) bearings. Since helicopter tail rotor teeter hinge bearings are a commonly replaced item, it is feared that technicians may occasionally neglect to reference the manufacturer's maintenance manual, which could result in an undertorqued condition. If the teeter hinge bolt breaks in flight, the tail rotor may depart the aircraft causing loss of directional control, and possibly loss of the helicopter.

Recommendation

When installing or adjusting the tail rotor on R22 helicopters, you should use the procedures in the Robinson Maintenance Manual, Section 9.212 or 9.213. You should apply the higher than standard torque to the tail rotor teeter (delta) hinge bolt, part number NAS1304-38 or NAS6604-38. We recommend that you apply a torque stripe to the bolt to detect rotation per the December 31, 1998, revision of the Robinson Maintenance Manual, or subsequent revision.

For Further Information Contact

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